FORMAT: GS/16600

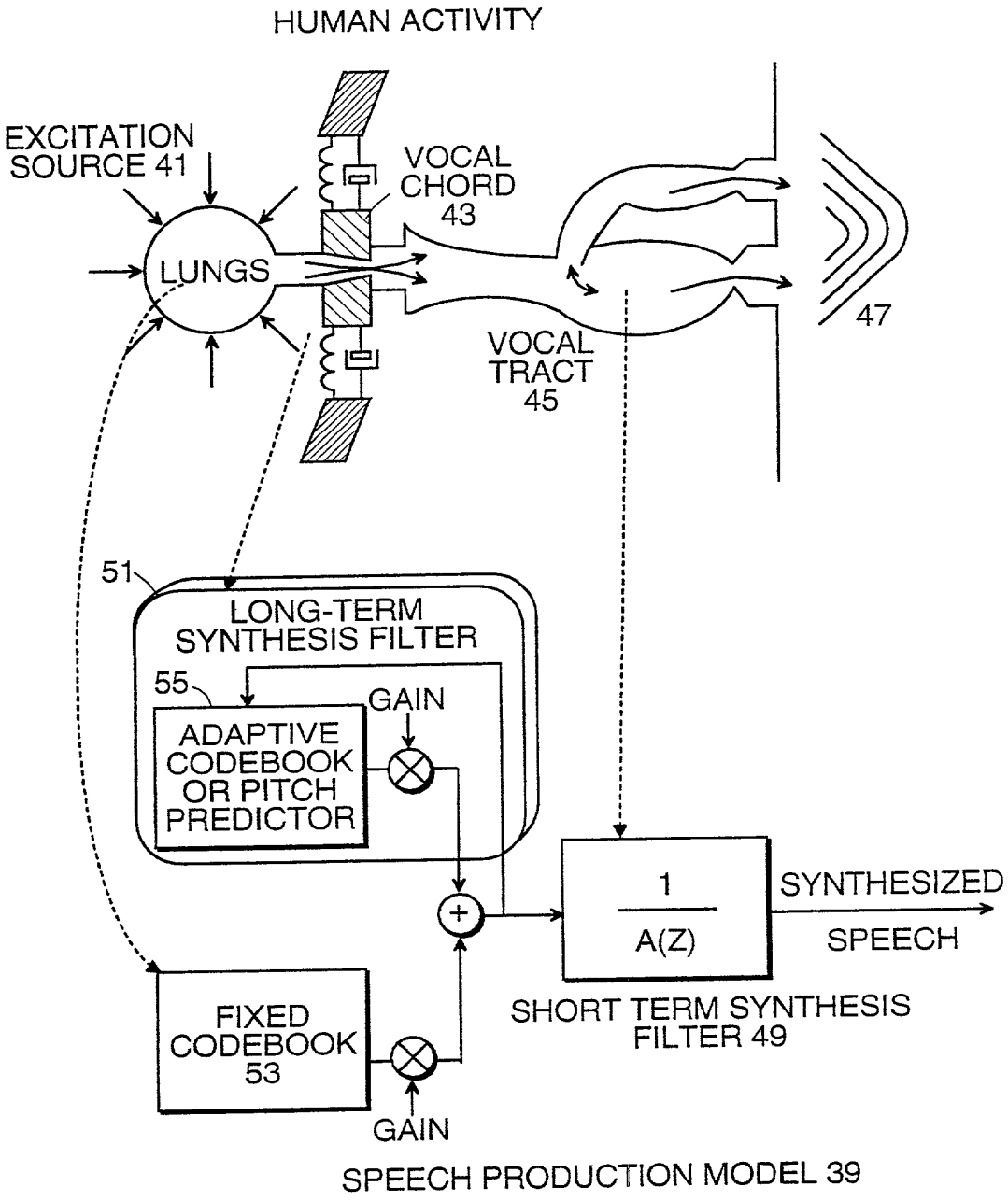


FIG. 1

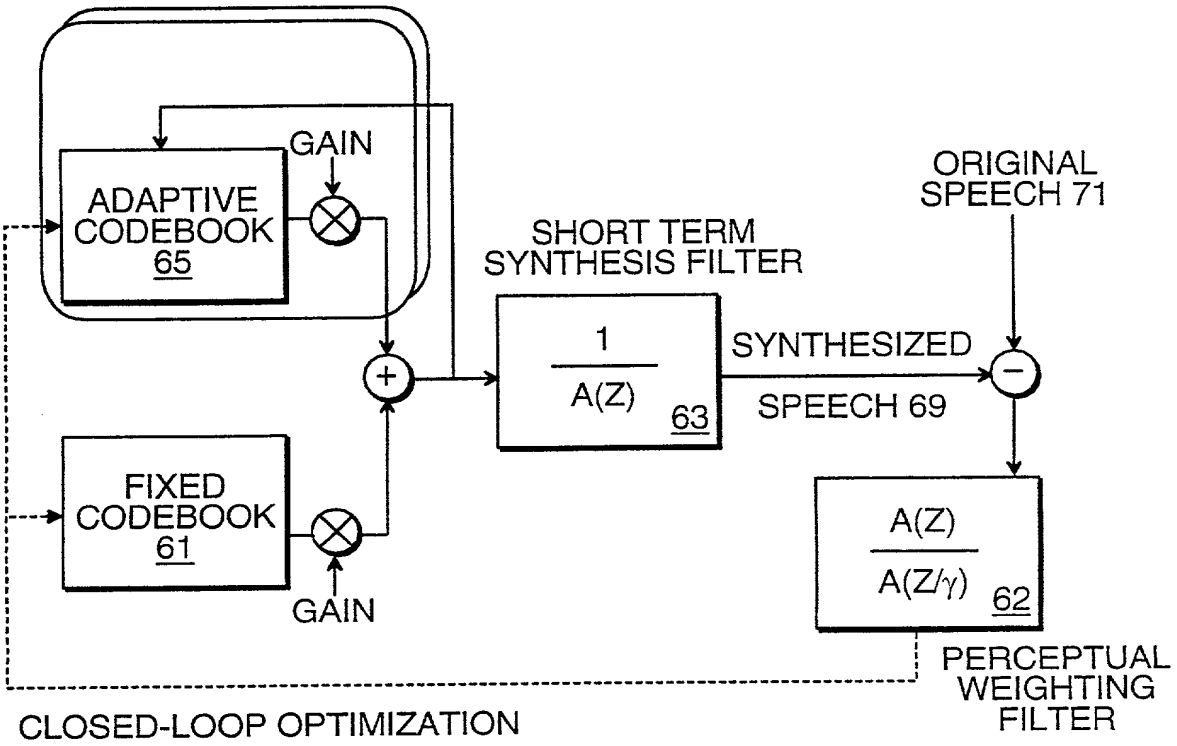

GAIN
ADAPTIVE CODEBOOK 65
SHORT TERM SYNTHESIS FILTER
ORIGINAL SPEECH 71
1
A(Z)
63
SYNTHESIZED SPEECH 69
FIXED CODEBOOK 61
GAIN
A(Z)
A(Z/γ)
62
PERCEPTUAL WEIGHTING FILTER
CLOSED-LOOP OPTIMIZATION

FIG. 2a

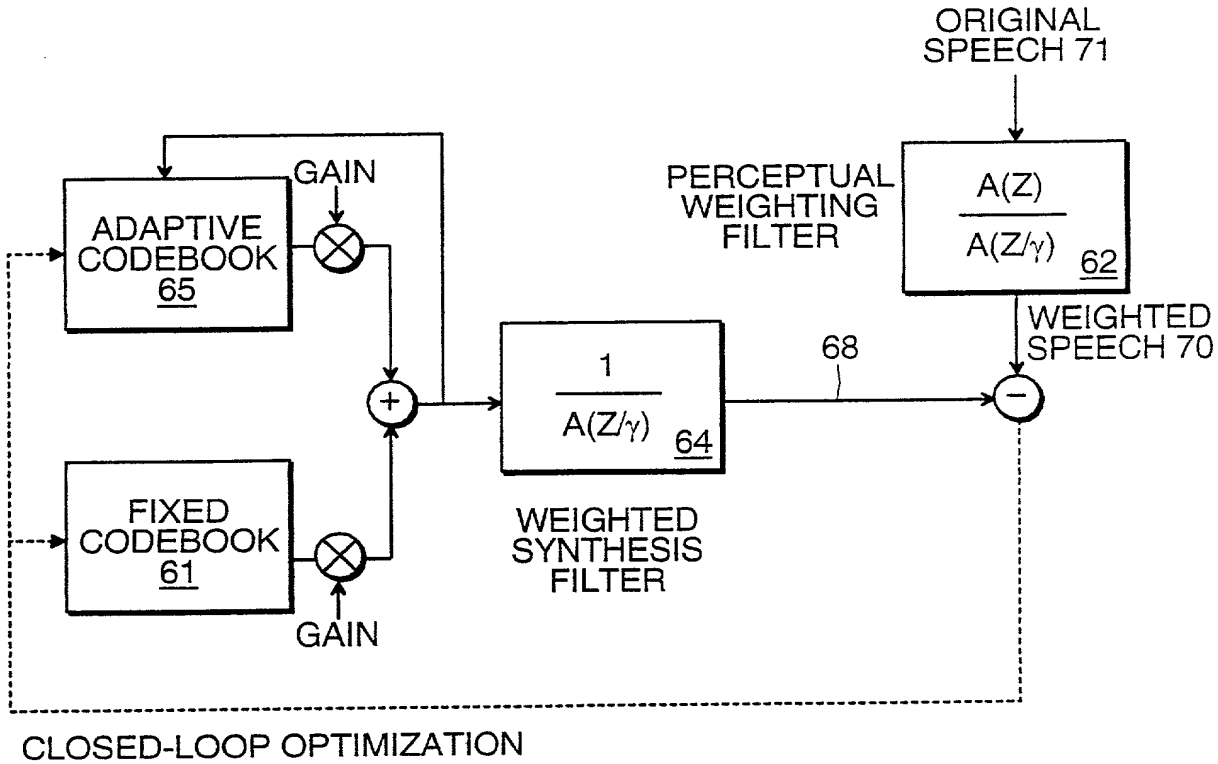

ORIGINAL SPEECH 71
PERCEPTUAL WEIGHTING FILTER
A(Z)
A(Z/γ)
62
WEIGHTED SPEECH 70
GAIN
ADAPTIVE CODEBOOK 65
1
A(Z/γ)
64
68
FIXED CODEBOOK 61
WEIGHTED SYNTHESIS FILTER
GAIN
CLOSED-LOOP OPTIMIZATION

FIG. 2b

Patent 6,249,758

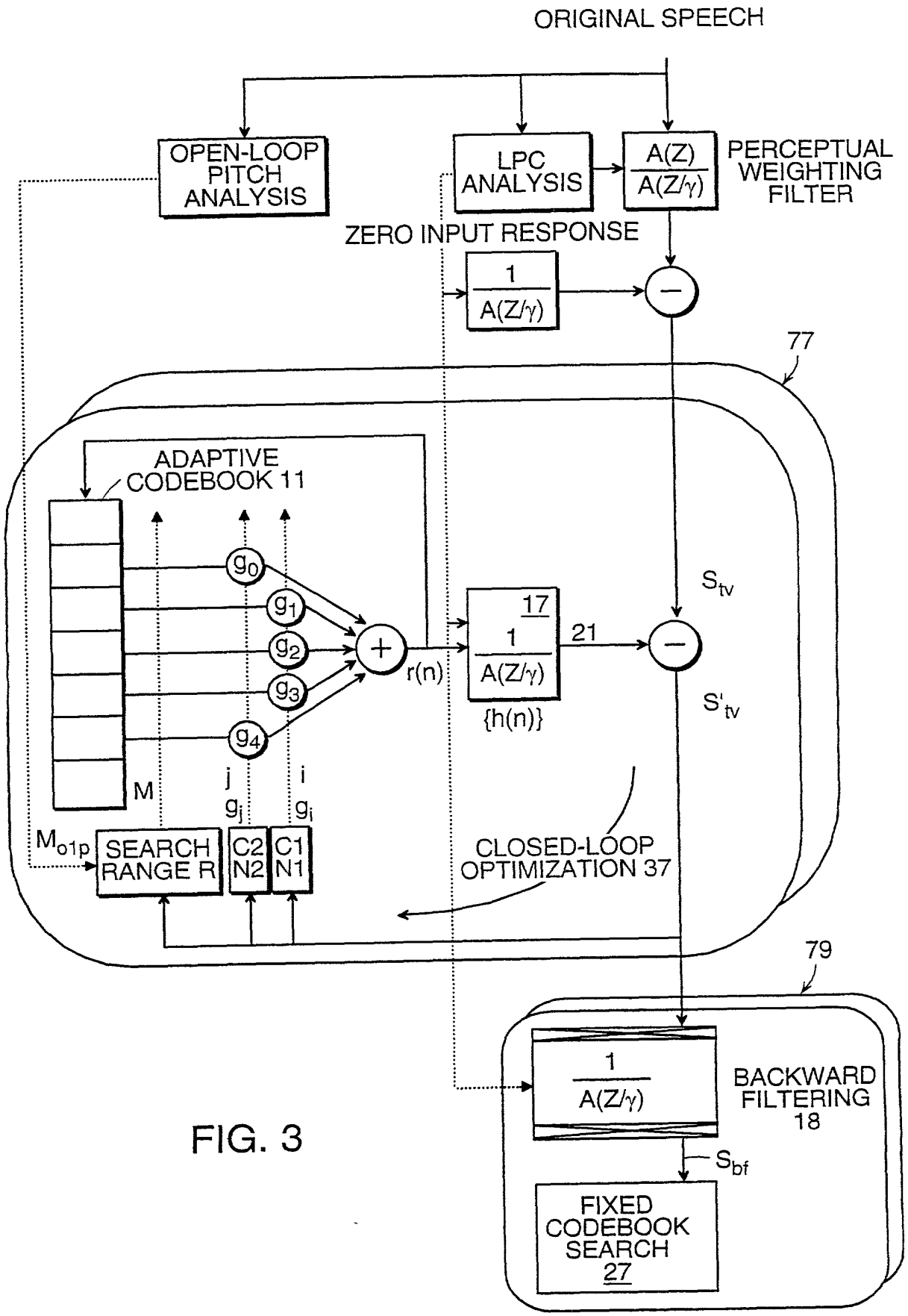
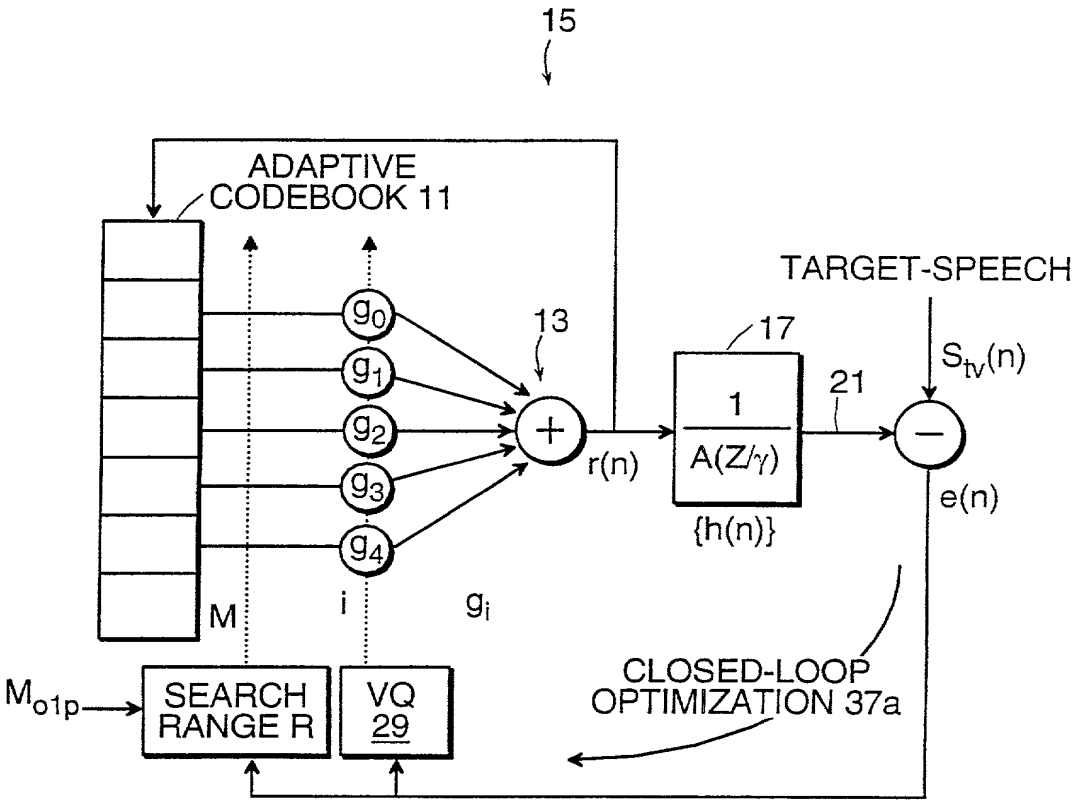


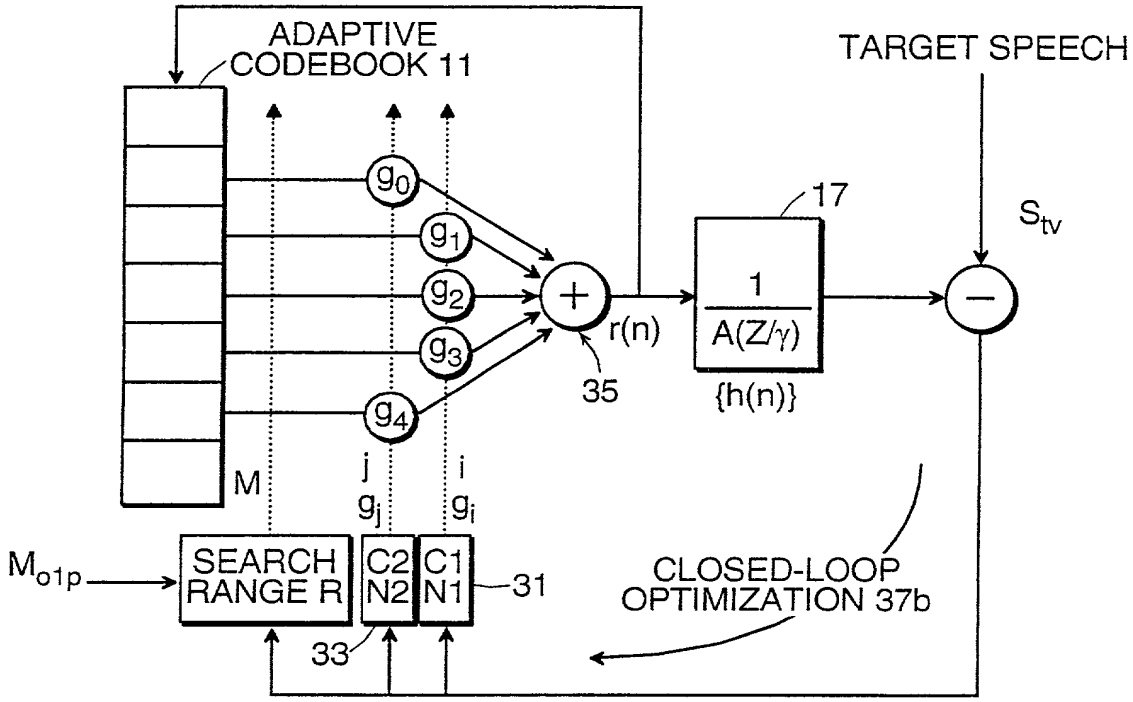
FIG. 3

Patent 6,574,593



MULTI-TAP PITCH PREDICTOR VQ

FIG. 4



MULTI-TAP PITCH PREDICTOR PRODUCT VQ

FIG. 5

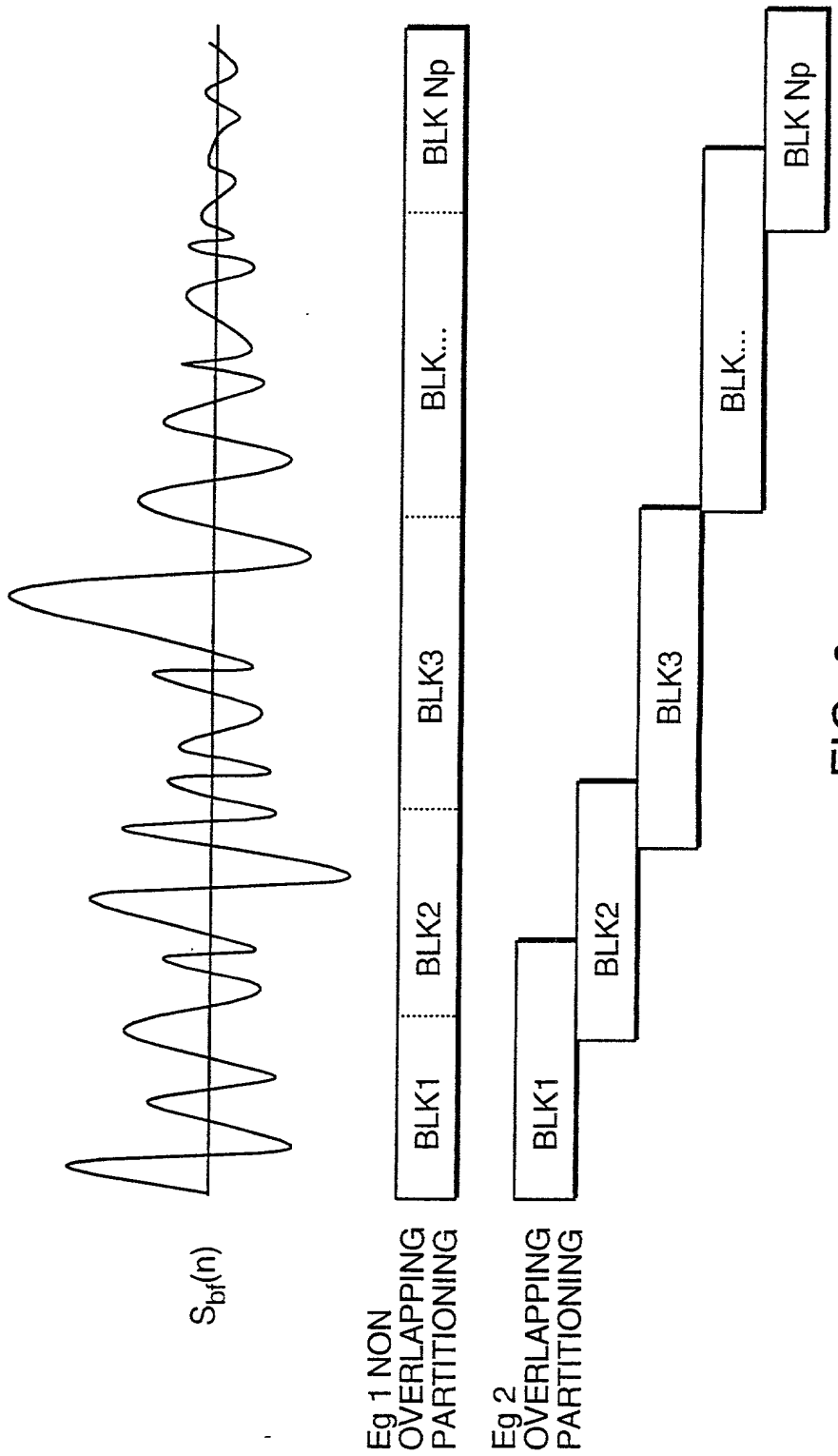


FIG. 6

Fortet 69/7660

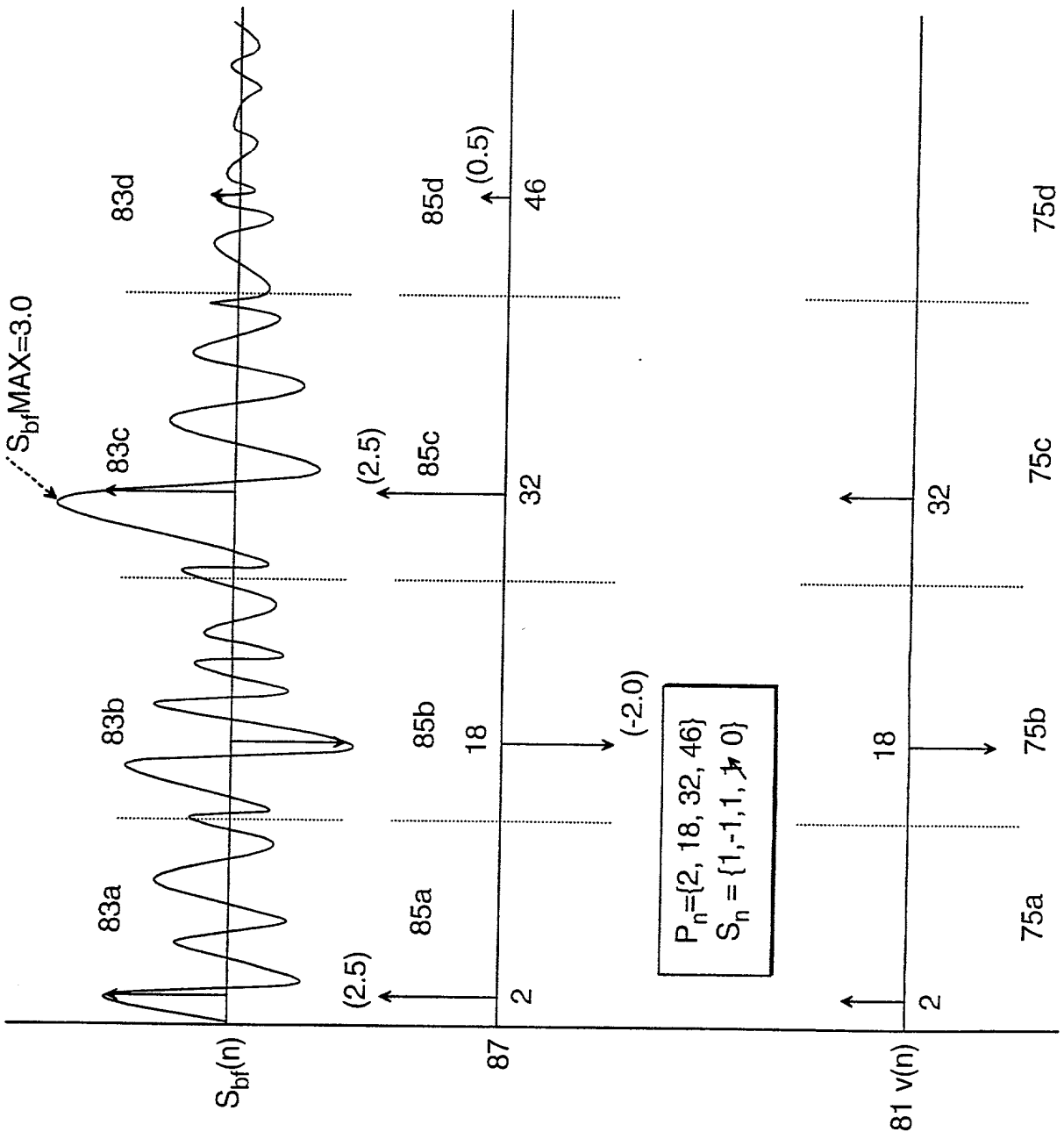

S_{bf}MAX=3.0
83a
83b
83c
83d
85a
85b
85c
85d
(2.5)
18
(-2.0)
32
(2.5)
46
(0.5)
2
87
S_{bf}(n)
P_n={2, 18, 32, 46}
S_n = {1,-1,1,-1 or 0}
75a
75b
75c
75d
18
32
2
81 v(n)

FIG. 7